

LIBRARY OF PRINCETON  
JUN 1 1954  
THEOLOGICAL SEMINARY

# The Princeton Seminary Bulletin



Vol. XLVII

MAY 1954

Number 4

# The Princeton Seminary Bulletin

Vol. XLVII

PRINCETON, N.J. MAY 1954

Number 4

SIGNS OF THE TIMES	<i>Edward H. Roberts</i>	3
SCIENCE AND CHRIST	<i>William Hallock Johnson</i>	7
THE AMERICAN IMAGE ABROAD—IN INDIA	<i>D. E. Devadutt</i>	17
ALUMNI ROLL CALL	<i>Robert M. Skinner</i>	29
PRINCETONIANA	<i>Lefferts A. Loetscher</i>	31
ALUMNI NEWS	<i>Orion C. Hopper</i>	35
PUBLICATIONS BY THE FACULTY	<i>Arlan P. Dohrenburg</i>	39

## BOOK REVIEWS

The Christian Approach to Culture, by Emile Cailliet	<i>Paul Ramsey</i>	47
The Interpreter's Bible. Vol. II, Leviticus, Numbers, Deuteronomy, Joshua, Judges, Ruth, I and II Samuel, edited by G. A. Buttrick, W. R. Bowie, P. Scherer, J. Knox, and S. Terrien	<i>Henry S. Gehman</i>	50
The Old Testament: Keystone of Human Culture, by William A. Irwin		50
The Root of the Vine, Essays in Biblical Theology, by Anton Fridrichsen and other members of Uppsala University		51
A. H. McNeile, An Introduction to the Study of the New Testament. Second edition revised by C. S. C. Williams	<i>Otto A. Piper</i>	51
<i>Die Verkündigung des Reiches Gottes in der Kirche Jesu Christi</i> by Ernst Staehelin		52
Report from Christian Europe, by Stewart Winfield Herman		53
Tertullian's Tract on The Prayer, The Latin text with Critical notes, an English translation, an introduction and explanatory observations, by Ernest Evans	<i>Bruce M. Metzger</i>	53
Jewish Symbols in the Greco-Roman Period; Vol. I, The Archeological Evidence from Palestine; Vol. II, The Archeological Evidence from the Diaspora; Vol. III, Illustrations [for Vols. I and II], by Erwin R. Goodenough.		54
Kerygma and Myth, A Theological Debate, edited by Hans Werner Bartsch, translated by Reginald H. Fuller		55

# SCIENCE AND CHRIST

WILLIAM HALLOCK JOHNSON\*

EARLY in this century, a professor of religion, the late G. B. Foster, closed his last lecture at the University of Chicago with these prophetic words: "If religion, without science, fails and falls back by reversion to type to the form of superstition, science, without religion, would seem to be an engine for the destruction of mankind."<sup>1</sup> Science and religion are both indispensable factors in human progress. A conflict between the two would be at present, "the wrong war, at the wrong time, and with the wrong enemy." The thesis of this paper is that science—modern science—and Christianity are not foes but friends.

Sir Oliver Lodge some years ago said that modern science was founded on the three principles of uniformity, continuity and evolution. A still more modern science has modified these principles in important respects. Laplace dreamed of a formula so comprehensive that by its means one could predict the position of every particle in the universe at any future time. Now the scientist cannot predict where a single electron will be at the next instant.

It used to be said that one atom of oxygen and two atoms of hydrogen would make a molecule of water, but all that chemistry now asserts is that if a multitude of atoms of oxygen is brought into contact with twice the number of atoms of hydrogen, it is

probable in a high degree that the result will be water.

The goal of science has been changed from mathematical certainty to statistical probability. Science now aims at the highest probability in the movements of large masses of atoms. The technical reason for this change can be explained only by the specialist, but among its causes may be mentioned Einstein's theory of relativity, Heisenberg's principle of indeterminacy, the erratic movements of the electron and the atom, and Planck's quantum theory.

## I

Because of the "new look" in science some historic controversies of the past are now seen in a new perspective. We are told now that the protest against the theories of Copernicus and Galileo was quite unnecessary, and that the controversy was in fact much ado about nothing. The words of the leading scientist of our day and of a leading Anglo-American philosopher are well known: Einstein and Infeld say that if we could "formulate physical laws so that they are valid for all CS" (co-ordinate systems), then "the struggle, so violent in the early days of science, between the views of Ptolemy and Copernicus would then be quite meaningless. Either CS could then be used with equal justification. The two sentences, 'the sun is at rest and the earth moves', or 'the sun moves and the earth is at rest', would simply mean two different conventions concerning two different CS."<sup>2</sup>

\* Dr. Johnson, '96, is President Emeritus of Lincoln University and a Trustee of the Seminary.

<sup>1</sup> See *Nietzsche*, by George B. Foster, p. x.

<sup>2</sup> *The Evolution of Physics*, 1938, p. 224.

Similarly A. N. Whitehead declared: "Galileo said that the earth moves and the sun is fixed; the Inquisition said that the earth is fixed and the sun moves; and Newtonian astronomers, adopting an absolute theory of space, said that both the sun and the earth move. But now we say that any one of these statements is equally true, provided that you have fixed your sense of 'rest' and 'motion' in the way required by the statements adopted."<sup>3</sup>

The limitless energy imprisoned within the tiniest atom may teach us that size is no measure of value. We need not apologize for the smallness of our planetary home, nor be intimidated by the countless galaxies that people the vast reaches of space.

## II

Sir Isaac Newton was a religious man, interested in theology, and he believed that his researches in physics and mathematics would promote the glory of God. Undue extension of his results, the work of his successors, led to a rigidly mechanical and deterministic theory of the universe. Newton's great laws of gravitation and motion worked so splendidly in both celestial and terrestrial physics that they were extended to cover the realms of life and even of mind. They were made to explain not only the fall of the apple but the upward thrust of the apple tree. Matter, Motion and Mechanism were the primary, if not the only, realities. Mind was either the product of the mechanism or a mere spectator impotent to affect its action. The world became a vast all-inclusive mechanism, rigidly excluding the free agency of

man or the freedom of God in the exercise of his grace.

Fundamental to Newton's brilliant generalizations was his view of the atom. He believed that the motion of every particle in the universe could be fitted into a mathematical equation. "Every particle of matter in the universe attracts every other particle in a straight line with a force proportional directly to the product of their masses, and inversely as the square of the distance between them." Newton thought that the atoms, described many years later by Clerk-Maxwell as "those foundation stones of the universe, unbroken and unworn," must be indestructible or the world would wear away. The ultimate particles of matter must be unchangeable; change is produced only by rearrangement of these particles.

Atomic research has proved that Newton's theory of the atom—"God in the beginning formed matter in solid, massy, hard, impenetrable particles"—was wrong in almost every particular. With atomic fissure atoms were found to be as porous as the solar system, to have internal motions of great velocity to be reservoirs of enormous energy and to be composed of electrons so unpredictable in their action as to defy strict mathematical treatment. The mechanical theory has been proved inadequate in its own field of inorganic matter, and as a theory of the universe has been completely undermined.

Of the current reaction to the mechanical theory, Eddington says emphatically: "Mechanical explanations of gravitation or electricity are laughed at nowadays."<sup>4</sup> Millikan has asked: "Has not science thrown Mechanism, roo

<sup>3</sup> *Science and the Modern World*, p. 263.

<sup>4</sup> *New Pathways in Science*, 1935, p. 32.

and branch, from its house?" Einstein and Infeld say that the advance of electrical science has "caused a complete breakdown of the belief that all phenomena can be explained mechanically. . . .<sup>5</sup> Science did not succeed in carrying out the mechanical program convincingly, and today no physicist believes in the possibility of its fulfillment. . . .<sup>6</sup> The new quantum physics removes us still further from the old mechanical view, and a retreat to the former position seems, more than ever, unlikely."<sup>7</sup>

The gain here for a religious view of the world is apparent. As Sir James Jeans has stated: "The universe, it must be said, is rather a great thought than a great machine." The life of man is more than a series of mechanical reflexes; it can be a great moral adventure. And God can again act in his own world in fulfilment of his redeeming purpose. The spirit of man can now breathe more freely, and his eyes can look away to the far horizons of faith. Science itself, to make way for its own advance and with no other purpose in view, has removed a serious road-block from the path of religious faith.

### III

Since the Victorian era the theories of Charles Darwin have dominated the science of biology. At first Darwinism and religion, or Christianity, were in hostile camps. Evolution was taught to mean the submergence of man in nature, and the substitution of chance for design or purpose in the world of life.

Darwinism, going beyond its founder,

<sup>5</sup> *Op.cit.*, p. 87.

<sup>6</sup> *Ibid.*, p. 125.

<sup>7</sup> *Ibid.*, p. 309.

early allied itself with Newtonian mechanics. It assumed that nature was inviolable and that in the world of life, up to and including man, there could be no "alien influxes," spiritual interventions, or "insertions *ab extra*." Man could not own a penny that was not inherited from his animal ancestors. If reason or conscience led him to believe in a living God or in the life of the world to come, then he was charged with presumption, because of the lowly origin of these endowments, for venturing to deal with these high themes. Man was tied, body and soul, to the past, and it was freely asserted that he could look for no higher destiny than can the beasts that perish.

In the popular mind evolution has always stood for both continuity and progress, yet these two have always been uneasy bedfellows. C. Lloyd Morgan, in his *Emergent Evolution*, 1925, struck out a new path. While seeking to combine continuity and progress, he championed the rights and independence of the new as against the old. Now though the word "emergent" is neutral, and does not tell us whether what emerges was there before or not, and while Morgan himself tries to be neutral between naturalism and theism, his emphasis is upon the complete novelty of the new. "If nothing new emerges," he declares, "—if there be only regrouping of pre-existing events *and nothing more*—then there is no emergent evolution."<sup>8</sup> The new, he holds, cannot be predicted from the old, and a loose "relationship" between the new and the old takes the place of a causal tie between them. Emergence thus replaces submergence.

The new theory, in spite of its dif-

<sup>8</sup> Pp. 1, 2.

faculties, became exceedingly popular. Philosophers hailed it with enthusiasm, and scientists, we may imagine, felt relief at being freed from self-imposed restrictions on the capacities of human nature, and from the shackles of the past. It created a new atmosphere and a new attitude toward the new in nature and in man. The pathway to illimitable progress was now opened before both science and religion. Man was given a new standing and a new and perhaps pre-eminent position in his home in the universe. Matthew Arnold's demand in his sonnet:

Know, man hath all that nature  
hath, but more,  
And in that *more* lie all his hopes  
of good—

was now granted. From the transcendence of man over nature to the sovereign transcendence of God is an easy step. In Lloyd Morgan's own words God is "above and beyond."<sup>9</sup> The theist finds continuity in the divine plan, and power to create the new in divine power.

It has often been said that Darwinism gave a death blow to teleology, and that Chance has usurped the place of Design in the world of organisms. Let us see how the matter stands today.

It had long been suspected that Design, banished from the organism, had taken refuge in the environment. If the original germs of life had not found lodgment in a fitting and prepared environment, they could not have survived for half an hour. It was L. J. Henderson in his *Fitness of the Environment*, 1913, who presented a classic argument against the Chance theory. Henderson made a careful analysis of the elements and compounds necessary to the en-

vironment if it was to be the seed bed of life and of evolution. He then argued that the juxtaposition of these elements and compounds by chance was not only highly improbable but in fact "almost infinitely improbable as the result of chance."<sup>10</sup> The gist of his argument is that the connection between the inorganic complex of chemical elements and the world of life is only intelligible "as a *preparation* for the evolutionary process"; and further that we know no cause except mind "which can produce results that are fully intelligible only in their relation to later events."<sup>11</sup> A plowed field, for instance, is only "fully intelligible" if someone has prepared to plant seed and raise a crop.

Henderson, when "face to face with Design," retreats a little and prefers the more abstract term of teleology, but the force of his argument remains, and so far as known has never been successfully answered. The world of life is dependent for existence on the inorganic world, and if teleology is securely domiciled in the latter it cannot be kept out of the former. We recall the words of A. E. Taylor: "If there is 'design' in nature, design must be woven into the whole fabric of nature."<sup>12</sup> There is evidence that it pervades the whole fabric whether we look at the "preparation" for the organic process, or its culmination in man, or even at an individual organ such as the eye, Paley's "optical instrument made in a dungeon."

That the tide has turned strongly in favor of design as over against chance is shown by the opinion of leading scientists, all of them convinced believers

<sup>10</sup> P. 271.

<sup>11</sup> P. 278.

<sup>12</sup> Does God Exist? 1947, p. 57.

<sup>9</sup> P. 301.

in the doctrine of evolution. Thus Eddington says: "Surveying our surroundings we find them to be far from a 'fortuitous concourse of atoms.' The picture of the world as drawn in existing physical theories shows an arrangement of the individual atoms and photons which if it originated by a chance coincidence would be excessively improbable. The odds against it are multi-millions to 1."<sup>13</sup>

A. H. Compton has said that "to the physicist it has become clear that the chances are infinitesimal that a universe filled with atoms having random properties would develop into a world with the infinite variety that we find about us."<sup>14</sup>

Lecomte du Noüy says: "To study the most interesting phenomena, namely Life and eventually Man, we are, therefore, forced to call on an anti-chance, as Eddington called it."<sup>15</sup> He even says: "For a man of science there is no difference between the meaning of the words 'anti-chance' and 'God.'"<sup>16</sup>

Professor Cuénot, a noted French biologist, in his book, *Invention et Finalité en Biologie*, adopts a theory of "anti-chance" (*anti-hazard*). Cuénot says: "Everything in the Cosmos seems to have been arranged to permit the creation, the diversification and the perpetuation of Life; it is incredible that mere chance should be capable of performing this triple function."<sup>17</sup>

The older theories of evolution which chained man to the past, or made him an accidental appendage to lower forms

of creation, have been outmoded. The two flank movements led by Emergent Evolution and "Anti-Chance" have had their effect. The result is that evolution is no longer a battlefield between science and religion. We may agree with the elder (T. H.) Huxley when he intimated that evolution after all made more teleology than it destroyed.

The advocates of Chance are under heavy fire and are definitely on the defensive. Foremost among these is Mr. Julian Huxley in his book, *Evolution: The Modern Synthesis*, 1942. He says: "The purpose manifested in evolution . . . is only an apparent purpose. It is just as much a product of blind forces as is the falling of a stone to earth or the ebb and flow of the tides. It is we who have read purpose into evolution. . . ."<sup>18</sup> On the next page he admits that evolution now, if it is to mean progress and not standstill and degeneration, "must be guided by a deliberate purpose." When purpose is first a chance product of a purposeless process, and then dominates the process to save it from a standstill, we feel that the chasm between the two stages of the process is too easily bridged.

With great candor Mr. Huxley describes the process which leads up to the appearance of man. He tells us (1) that every line of descent except that leading up to man runs into a blind alley, either of extinction or of stability; (2) that man, the evident goal of the process, exhibits the maximum of progress, independence of the environment, and control over it; (3) that man could not be evolved by natural forces from any existing anthropoid type; (4) and that if humanity disappeared from the

<sup>13</sup> *Op.cit.*, pp. 59, 60.

<sup>14</sup> As reported in the press.

<sup>15</sup> *Human Destiny*, 1947, p. 38.

<sup>16</sup> *Ibid.*, p. 202.

<sup>17</sup> Discussed by Julian Huxley in *The New Republic*, Dec. 10, 1945.

<sup>18</sup> p. 578.

earth it would not again be reproduced. This unique and unrepeatable process, without parallel before or after in natural history, and without which there would have been no human history and no science, deserves special treatment. In fact it could be admirably fitted into a theistic framework. But how could this long and steep and perilous ascent which Huxley describes have been accomplished if "blind forces" had been the only guide?

#### IV

It is interesting to note that the word "Creation" as well as design has entered again into the vocabulary of science. This is true whether the universe is thought to be expanding or running down. Suppose now that the law of entropy holds, and that the last chapter of human history will picture the last man cooking the last potato over the dying embers of the last fire. In this case the universe is a clock running down, and, as Jeans says, must have been wound up at some time not too remote. Jeans' clock running down has taken the place of Paley's watch in theistic discussion. But there may be regenerating factors countering the increase of entropy. Eddington, again, says: "From the expansion of the universe we reach independently the same outlook as to the beginning and end of things that we have here reached by considering the increase of entropy. In particular the conclusion seems almost inescapable that there must have been a definite beginning of the present order of nature."<sup>19</sup>

The latest theory of the end of human history is that the sun, before it becomes a black star, will temporarily grow hotter. In this case "the elements

will be dissolved with fire, and the earth and the works that are upon it will be burned up" (II Peter 3. 10). Professor Fred Hoyle of Cambridge believes "that the Sun will grow steadily more luminous as its hydrogen supply is converted into helium, and this will go on until the oceans boil on the earth . . . as the Sun grills the earth it will swell, first slowly and then with increasing rapidity, until it swallows the inner planets one by one: first Mercury, then Venus, and then the Earth."<sup>20</sup>

It is not the mission of physical science to teach religion or theology. But science in its newest phases has been the handmaid of religious faith, both negatively by removing obstacles from its path, and positively by bringing forward new evidences of the power and wisdom and glory of God. As we read of the wonders of science: the Hydrogen Blast of March first, "750 times worse than Hiroshima's"; or the illimitable reaches of space to be opened to human gaze by the new Palomar telescope; or the wonderfully intricate structure of the eye, preaching of purpose all the time,<sup>21</sup> a more reverent mood is induced in thoughtful minds. Our mysterious universe appears ever more mysterious, and we are prompted to confess, "Great are the works of the Lord!"

<sup>19</sup> *New Pathways in Science*, p. 67. The writer asked a distinguished mathematical physicist whether the theory of an expanding universe contradicted the second law of thermodynamics, and the answer was that "the relation between the two is not clear."

<sup>20</sup> *The Nature of the Universe*, 1950, p. 86.

<sup>21</sup> See the eloquent description of the structure and function of the eye in ten closely printed pages, packed with the findings of the latest science, in Sherrington's *Man on His Nature*, 1941.

It is a singular fact that theories that were unfriendly to religion lost their appeal not through theological controversy but by the advance of science itself. The cure for science is more science. The theories that reduced man to a robot or the accidental product of blind chance were found too narrow to include the facts, and were swept aside by the scientific advance. Science corrected its own mistakes, and was a fore-runner preparing the way of the Lord. The road was cleared and the green light was given. No fact, or department, or doctrine of science forbids us to believe with the prophet that "He hath made the earth by his power, he hath established the world by his wisdom."

## V

We come to the heart of our subject when we examine more closely the relation of the newer science to Christianity. Two parties have been facing each other in a centuries-old controversy. One party accepts the apostolic witness that Christ Jesus came into the world to save sinners. It confesses that Christ is Lord of all, Lord of nature as well as of supernature, of nature as well as of grace. The other party regards the world of nature as a self-enclosed system, governed by fixed and rigid laws. Its frontiers must be zealously guarded against alien influences from a realm above nature should intrude and break up its uniformity and continuity.

Under the title, "Who Christ is, and What He Has Done," a recent translator thus renders an eloquent passage from Paul's Epistles:

Now Christ is the visible expression of the invisible God. He existed before creation began, for it was through

Him that everything was made, whether spiritual or material, seen or unseen. Through Him, and for Him, also, were created power and dominion, ownership and authority. In fact, every single thing was created through, and for, Him. He is both the First Principle and the Upholding Principle of the whole scheme of creation. And now He is the head of the Body which is composed of all Christian people. Life from nothing began through Him, and life from the dead began through Him, and He is justly called the Lord of all. It was in Him that the full nature of God chose to live, and through Him God planned to reconcile in His own Person, as it were, everything on earth and everything in heaven by virtue of the sacrifice of the Cross.<sup>22</sup>

This high Christology pervades the New Testament. It is found in the prologue of John's Gospel: "All things were made through him, and without him was not anything made." It is found in the first chapter of Hebrews: "Whom he appointed heir of all things, through whom also he created the worlds . . . upholding all things by the word of his power." It is implicit in the Synoptic Gospels which picture Christ as Lord of all, with transcendent authority over the powers of nature, over life and death, over the bodies and minds of men, and over the mysterious realm of spirits, demonic and angelic. He is there pictured as the strong Son of God, traveling in the greatness of his strength

<sup>22</sup> Colossians 1. 15-20 in J. B. Phillips' *Letters to Young Churches*, 1951, p. 125. The translation is in part paraphrase but conveys the thought of the original.

and mighty to save. The same theme is re-echoed by the leaders of the Church in all ages. It is shared by all the main branches of the Church, and supported by their creeds and confessions, their ritual and hymnology.

This view of Christ makes him responsible for the existence of the world and for its continued existence. In him all things consist or hold together. He is the principle of unity and stability that makes the world a cosmos instead of a chaos. He is the bond of union not only in the material and spiritual world, but in human society. Without him civilization collapses. Without him society is divided into hostile parties and blocs. Without him the closest ties of family life are torn apart. Without him personality is disintegrated. Without him the bonds of brotherhood in human society give way to tragic disorder and chaos.

So pervasive are the transcendent elements in the life and ministry of Jesus that when these are eliminated a school of critics, in the interests of consistency, finds it necessary to reduce him, if not to nonentity, at least to unknowability or negligibility.

Let us glance now at the other side of the picture. For centuries the enthusiastic defenders of the integrity and inviolability of nature have used the fixity of natural law as their knock-down argument against the possibility of miracles. Thus Spinoza (who died in 1677) declared: "If anything could take place in nature contrary to its laws, God would thereby contradict himself." A century later Hume (died 1776) stated: "We learn from experience that the laws of nature are never violated." Advancing another hundred years we find Strauss (died 1874) insisting upon "the undeviating constancy of the laws of

nature." About the same time Darwin wrote to a student: "That the more we know of the fixed laws of nature the more incredible do miracles become."<sup>23</sup> At the turn of the century Harnack said: "We are of the unshakable conviction that what happens in space and time is so underlaid by the general laws of motion, that so in this sense, that is, as violations of the laws of nature (*Naturzusammenhangs*) miracles cannot happen."<sup>24</sup>

If these writers had lived in the middle of the twentieth century they would have spoken differently. The leading scientists of our day have silenced the guns of those who in the name of science have opposed miracles. In the age of Relativity and the Quantum Theory and the statistical laws of nature, "fixed laws" that were relied on to outlaw miracles are no longer fixed. The question of the relation between nature and supernature, analogous to that between freedom and mechanism in human conduct, is now left entirely open. Let it be understood that the word "science" can no longer be used as a magic incantation to exorcize religious faith.

Science and Christianity are no longer in hostile camps, facing each other and shooting at each other across no man's land. They are rather like two bands of workmen building a tunnel and approaching each other from opposite sides of a mountain. When the student of the world of organisms finds himself face to face with Design, and the nuclear scientist is startled to find himself face to face with omnipotence; when the "miracles" of science seem as

<sup>23</sup> *Life and Letters*, vol. 1, p. 278.

<sup>24</sup> *Das Wesen des Christentums*, 5th ed. 1901, p. 17.

wonderful as the miracles of religion; when as science advances the possible is reached and passed time after time, and the very word "impossible" becomes obsolete in science, as Abraham long ago banished it from the vocabulary of religion; when the insatiable curiosity of science reaches out into the unknown and finds its naturalistic postulates inadequate; and when leading scientists can interpret their results only in a theistic framework; then a believer in the apostolic Christology can predict with confidence that the parties on opposite sides of the mountain will soon meet in the middle and clasp hands in fraternal greeting.

The aphorism of Lessing, that eternal truths of reason cannot be proved by accidental truths of history, was meant to discredit the historic accounts of Jesus' ministry. A good answer to Lessing is in the words of Emil Brunner, who says:

"It is only the absolutely personal God who can give a historical event the content of absolute meaning, making it an event which cannot happen more than once. Once and for all. It is the event in which eternity becomes time, when Godhead becomes manhood, when the absolute God is revealed in a historical person."<sup>25</sup> The coming of Christ into the world to save sinners was not an accidental event of history. It was its central event, and the years of history, most appropriately, are measured backward and forward from his coming.

The relevance of Christ to the existence and progress of science is seen in the number and strength of the ties

which bind science and Christianity together.

1. Christianity made possible the scientific era. Christianity taught that Nature was under the control of a wise and sovereign Will, instead of a blind fate, or the caprice of a tyrant, or the jealousies of rival deities. It took the "spirits" out of material objects and put mathematics and uniform laws in their place. Nature could now be studied freely without fear of reprisals. The initial debt which science owes to Christianity and its conquest over polytheism and paganism has never been repaid.

2. Both science and Christianity deal in futures. Both churches and research laboratories are temples of faith, dealing with things not seen as yet, and looking to the future for the verification of their hypotheses and their hopes. Max Planck, the father of the Quantum Theory, shows that science deals with the unseen. He says that every pioneer in science "is guided by an unpretentious but essential principle. This principle is faith—a faith which looks ahead."<sup>26</sup> He adds that the scientist feels secure in surrendering to "a faith in the rational ordering of the world."<sup>27</sup>

3. There are certain moral qualities which the devoted scientist and the devout believer should have and do have in common: modesty, honesty, a passion for the truth and a determination to follow it wherever it will lead. The scientist, like Newton, is picking up pebbles on the limitless shore of truth, while the Christian has not yet attained, but is following on to know the Lord.

4. Modern science has discovered new and undreamed of sources of physi-

<sup>25</sup> *Current Religious Thought*, Oberlin, Ohio, May-June, 1952, p. 8.

<sup>26</sup> *The Philosophy of Physics*, 1936, p. 121.

<sup>27</sup> *Ibid.*, p. 125.

cal energy. Chemists in a recent convention promised us in the near future a veritable millennium of abundance of the good things of life. Christians are encouraged to explore new and untapped sources of spiritual power. They are encouraged to make large drafts upon the infinite power and grace of God by the instrumentalities of faith and prayer and effort. Even though two of the strongest nations are now arming for a conflict that would engulf the world in irreparable ruin, yet out of a seemingly hopeless situation springs an unquenchable hope. A new hope has been kindled of the fulfilment in history of the dream of the poets:

“It’s comin’ yet for a’ that—  
That man to man, the world o’er,  
Shall brithers be for a’ that.”—

and of the vision of the prophets, when peace shall reign in righteousness, when men shall learn war no more, when the glory of the Lord shall be revealed and all flesh shall see it together. This is the “faith tremendous” which inspires the Church in her world-wide enterprise.

5. Never before in the history of the world were the dependence, one upon the other, of science and Christianity so clearly evident. We need more science to gear the new energy into useful production, to feed the starving millions, and raise the living standards of depressed peoples all over the earth. We need deeper religion to supply motives for this great task, and to restrain the reckless use of the powers of life and death now in our hands. Science has brought together the ends of the earth

and made the world a neighborhood. But the neighborhood is not safe until it becomes a brotherhood. Christianity alone with its law of love can make men brothers. Never were Christ and the religion which he founded so relevant and so indispensable as they are today in this age of science.

When some one utters the word “Science” today as an excuse for the rejection of religious faith, he should be sharply challenged with the question: “What science? Whose science? The science of what age? The science that has given us radio and television, radar and the jet plane, the atomic bomb and the guided missile? Or the science of yesterday, which has been discarded and cast aside by the very momentum of scientific advance?”

Today science and Christianity are friends, not foes. Their interests are in concord, not in conflict. Each is safest when it jealously safeguards the complete freedom of the other. The devoted scientist and the devout Christian can work in harmony side by side, both guided by that love which moves the sun in heaven and all the stars.

In the Incarnation, the central mystery of our holy religion, nature and the supernatural, time and eternity, meet in unity. The Word was made flesh and dwelt among us, and brought life and joy and light into a darkened world. In him are hid all the treasures of wisdom and knowledge. Amid the mysteries and tragedies of our time, we can trust the compassion of his Cross and the certainty of his Resurrection.